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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,776	10/31/2000	Kalle Ahmavaara	4925-89PUS	6165

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EXAMINER
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SMITH, SHEILA B

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 04/09/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/646,776

Applicant(s)

AHMAVAARA ET AL.

Examiner

Sheila B. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |                                                                                                                            |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>  </u> | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornberg et al. (U. S. Patent Number 6,097,700) in view of JP10271059 and further in view of well known prior art.

**Regarding claim 1**, Thornberg et al. discloses all of the claimed invention as set forth in the instant application, additionally Thornberg et al. discloses a packet switched radio channel congestion control, further Thornberg et al. discloses a method for delay control adjustment in the uplink direction in a cellular telecommunications network comprising a plurality of functionally interconnected nodes for transmission of data (which reads on column 2 lines 35-45), characterized in that at least one first node sends a timing adjustment command to at least one second node (which reads on column 13 lines 50-55), if at least one uplink data packet sent by said at least one second node arrives at said at least one first node at a point in time (which reads on column 13 lines 50-55), which point in time is outside a predefined time period (which reads on column 13 lines 55-60), and at least one node functions as said at least one first node in view of at least one node preceding it in the uplink direction in the network structure (which reads on column 13 lines 60-67), and as said at least one second node in view of at least one node following it in the uplink direction in the network structure (which reads on column 13

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lines 60-67). However Thornberg et al. fails to specifically disclose (a) plural nodes which requests at least one second node to adjust the sending time of uplink data packets and (b) functional interconnected nodes are hierarchical.

In a similar field of endeavor, JP10271059 discloses CDMA method cellular radio system, JP10271059 further disclosed (a) plural nodes which requests at least one second node to adjust the sending time of uplink data packets as disclosed in the abstract and solution.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Thornberg et al. with the teachings of JP10271059 for the purpose of synchronizing the timing transmission.

~~Although~~ <sup>Further,</sup> the combination of Thornberg et al. in view of JP10271059 fail to specifically disclose functional interconnected nodes are hierarchical.

The examiner contends it is well known in the art that a functional interconnected nodes are hierarchical. ~~It~~ would have been obvious to a person of ordinary skill in the art to modify the combination of Thornberg et al. in view of JP10271059 with the teaching of well known prior art since a base station communicates in the uplink and downlink with both the mobile station and the base station controllers establishing a hierarchy.

**Regarding claim 2**, Thornberg et al. discloses everything claimed, as applied above (see claim 1) additionally, Thornberg et al. discloses a method characterized in that at least one of said at least one second node is a base station (which reads on column 3 lines 60-67).

**Regarding claim 3**, Thornberg et al. discloses everything claimed, as applied above (see claim 1) additionally, Thornberg et al. discloses a method characterized in that at least one of

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said at least one first node is a protocol control block of a radio network controller (which reads on column 3 lines 60-67).

**Regarding claim 4**, Thornberg et al. discloses everything claimed, as applied above (see claim 1) additionally, Thornberg et al. discloses a method in that at least one of said nodes is a combining unit (which reads on column 3 lines 60-67).

**Regarding claim 5**, Thornberg et al. discloses everything claimed, as applied above (see claim 1) additionally, Thornberg et al. discloses A method for delay control adjustment in the downlink direction in a cellular telecommunication network comprising a plurality of functionally interconnected nodes for transmission of data, characterized in that at least one second node sends a timing adjustment request to at least one first node (which reads on column 4 lines 15-20), if at least one downlink data packet sent by said at least one first node arrives at said at least one second node at a point in time (which reads on column 13 lines 60-67), which point in time is outside a predefined time period (which reads on column 13 lines 55-60), and at least one node functions as said at least one second node in view of at least one node preceding it in the downlink direction in the network structure (which reads on column 13 lines 55-60), and as said at least one first node in view of at least one node following it in the downlink direction in the network structure. However Thornberg et al. fails to specifically disclose (a) plural nodes which requests at least one second node to adjust the sending time of uplink data packets and (b) functional interconnected nodes are hierarchical.

In a similar field of endeavor, JP10271059 discloses CDMA method cellular radio system, JP10271059 further disclosed (a) plural nodes which requests at least one second node to adjust the sending time of uplink data packets as disclosed in the abstract and solution.

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At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Thornberg et al. with the teachings of JP10271059 for the purpose of synchronizing the timing transmission.

~~Although~~<sup>Further,</sup> the combination of Thornberg et al. in view of JP10271059 fail to specifically disclose functional interconnected nodes are hierarchical.

The examiner contends it is well known in the art that a functional interconnected nodes are hierarchical. ~~It~~ would have been obvious to a person of ordinary skill in the art to modify the combination of Thornberg et al. in view of JP10271059 with the teaching of well known prior art since a base station communicates in the uplink and downlink with both the mobile station and the base station controllers establishing a hierarchy.

**Regarding claim 6.** Thornberg et al. discloses everything claimed, as applied above (see claim 5) additionally, Thornberg et al. discloses ~~A~~ method according to claim 5, characterized in that at least one of said at least one second node is a base station (which reads on column 3 lines 60-67).

**Regarding claim 7.** Thornberg et al. discloses everything claimed, as applied above (see claim 5) additionally, Thornberg et al. discloses ~~A~~ method according to claim 5, characterized in that at least one of said at least one first node is a protocol control block of a radio network controller (which reads on column 3 lines 60-67).

**Regarding claim 8.** Thornberg et al. discloses everything claimed, as applied above (see claim 5) additionally, Thornberg et al. discloses A method according to claim 5, characterized in that at least one of said nodes is a splitting unit (which reads on column 3 lines 60-67).

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2. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornberg et al. (U. S. Patent Number 6,097,700) in view of JP10271059 .

*Regarding claims 9 and 10.* Thornberg et al. discloses everything claimed, as applied above (see claim 1) additionally, Thornberg et al. discloses a system in a cellular telecommunications network for controlling delays between a radio network controller and at least one base station, characterized in that the system comprises a radio network controller for controlling the transfer of data, at least one intermediate node for forwarding data in the network., which at least one intermediate node is functionally connected to said radio network controller (which reads on column 2 lines 35-45), and a base station for sending and receiving data, which base station is functionally connected to said at least one intermediate node (which reads on column 3 lines 60-67)., and in that said radio network controller is arranged to send a timing adjustment command to at least one of said at least one intermediate node as a response to reception of at least one data packet from said at least one of said at least one intermediate node after a predetermined time period (which reads on column 13 lines 50-55), and said at least one intermediate node is arranged to send a timing adjustment command to said base station as a response to reception of at least one data packet from said base station after predetermined time period. However Thornberg et al. fails to specifically disclose plural nodes which requests at least one second node to adjust the sending time of uplink data packets.

In a similar field of endeavor, JP10271059 discloses CDMA method cellular radio system, JP10271059 further disclosed plural nodes which requests at least one second node to adjust the sending time of uplink data packets as disclosed in the abstract and solution.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Thornberg et al. with the teachings of JP10271059 for the purpose of synchronizing the timing transmission.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (703)305-0104. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika Gary can be reached on 703-308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Smith 

April 2, 2004

  
ERIKA GARY  
PATENT EXAMINER